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10/719,200	11/20/2003	Melinda Penney	12966-005001	1980
26161	7590	04/19/2005	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			VERBITSKY, GAIL KAPLAN	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/719,200

Applicant(s)

PENNEY ET AL.

Examiner

Gail Verbitsky

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-27 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4, 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 61270631A [hereinafter JP].

JP discloses in Figs. 1-3 a digital clinical thermometer for measuring temperature of a living body by inserting a portion (probe) of the thermometer in the mouth of the living body to rest on the lower lip and lower jaw (teeth), the thermometer comprising a probe with first (distal) and second (proximal) ends and a curved (non-linear) intermediate portion of a substantially constant radius; a temperature sensor disposed near the first (distal) end of the probe; a housing portion separate from the probe and having a digital display for displaying the temperature measured; an electronic circuitry, inherently positioned within the housing, in communication with the temperature sensor, as claimed by applicant. The housing has a control button 3. Since the housing is in the vicinity of the probe, the control button is also in the vicinity of the probe. The probe is connected to the housing by a cord 11.

For claim 2: JP does not explicitly state teach whether the intermediate portion is fixed or re-shapeable. However, as shown in Fig. 3, at least for a period of time, during temperature measurements, the intermediate portion is fixed in the non-linear shape.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada (U.S. 5458121) in view of JP.

Harada discloses in Figs. 1-5 a clinical thermometer comprising a probe with first (distal) and second (proximal) ends and a curved (non-linear) movable intermediate portion; a temperature sensor (thermistor, IR) disposed near the first (distal) end of the probe; a housing portion (holder) 20 separate from the probe.

For claim 2: As shown in Figs. 1-5, at least for a period of time, during temperature measurements, the intermediate portion is fixed in the non-linear shape.

For claim 4: the fact that the probe is easy bendable, would imply that it could be bent in such a way that the radius of the curve could be substantially constant.

For claim 5: the device comprises an elastomer 30 and a spring 39 allowing the intermediate portion to stay in a straight or curved shape till it is moved to another shape.

For claim 9: the use of the particular material, i.e., polymer, as stated in claim 9, for the intermediate portion, absent any criticality, is only considered to be the "optimum" material that a person having ordinary skill in the art at the time the invention was made

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using routine experimentation would have found obvious to provide for the intermediate portion disclosed by Harada since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. In re Leshin, 125 USPQ 416.

For claim 24: the use of the particular material, i.e., malleable metal, as stated in claim 24, for the stiffening element, absent any criticality, is only considered to be the "optimum" material that a person having ordinary skill in the art at the time the invention was made using routine experimentation would have found obvious to provide for the stiffening element disclosed by Harada since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. In re Leshin, 125 USPQ 416.

For claim 25: the use of the particular material, i.e., ductile polymer, as stated in claim 25, for the probe, absent any criticality, is only considered to be the "optimum" material that a person having ordinary skill in the art at the time the invention was made using routine experimentation would have found obvious to provide for the probe element disclosed by Harada since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. In re Leshin, 125 USPQ 416.

Although it is well known in the art that the thermometer cannot properly function without a display and a circuit, Harada does not explicitly teach that the thermometer is

a digital thermometer having an electronic circuit, as stated in claims 1, 22, with the remaining limitations of claims 1-9, 22-27.

JP discloses in Figs. 1-3 a digital clinical thermometer for measuring temperature of a living body by inserting a portion (probe) of the thermometer in the mouth of the living body to rest on the lower lip and lower jaw (teeth), the thermometer comprising a probe with first (distal) and second (proximal) ends and a curved (non-linear) intermediate portion of a substantially constant radius; a temperature sensor disposed near the first (distal) end of the probe; a housing portion separate from the probe and having a digital display for displaying the temperature measured; an electronic circuitry, inherently, positioned within the housing, in communication with the temperature sensor, as claimed by applicant.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the housing of the device, disclosed by Harada, so as it comprises a digital display and an electronic circuit, as taught by JP, in order to enable the user not only to place the thermometer in the patient's cavity, but also to obtain a visual data representing the measured temperature, in order to take necessary actions.

With respect to the preamble of claims 1 and 22: the preamble of the claims does not provide enough patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and a portion of the claim following the preamble is a self-contained description of the structure not

depending for completeness upon the introductory clause. Kropa v. Robie, 88 USPQ 478 (CCPA 1951).

5. Claims 3, 9, 14, 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP in view of Harada.

JP discloses the device as stated above in paragraph 2.

JP does not teach all the limitations of claims 3, 9, 14, 22-27.

Harada discloses the thermometer, as claimed by applicant. Harada discloses in Figs. 1-5 a clinical thermometer comprising a probe with first (distal) and second (proximal) ends and a curved (non-linear) movable intermediate portion; a temperature sensor (thermistor, IR) disposed near the first (distal) end of the probe; a housing portion (holder) 20 separate from the probe and inherently having a display for displaying the temperature measured; an electronic circuitry, in communication with the temperature sensor, as claimed by applicant. As shown in Figs. 1-5, at least for a period of time, during temperature measurements, the intermediate portion is fixed in the non-linear shape. The device comprises an elastomer 30 and a spring 39 allowing the intermediate portion to stay in a straight or curved shape till it is moved to another shape. The thermometer comprising a portion (spring/ elastomer) allowing the user to move the probe between its linear and non-linear shape without the user contacting/ touching the probe, simply by inserting it into a patient's cavity.

For claim 14: Harada teaches a probe comprising a hard core (spring) and a relatively soft elastomer sheath enclosing the core and being exposed to the patient's cavity. For claims 9, 14: the use of the particular material, i.e., polymer, as stated in claim 9, for the

intermediate portion, absent any criticality, is only considered to be the "optimum" material that a person having ordinary skill in the art at the time the invention was made using routine experimentation would have found obvious to provide for the intermediate portion disclosed by Harada or JP since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. In re Leshin, 125 USPQ 416.

For claim 24: the use of the particular material, i.e., malleable metal, as stated in claim 24, for the stiffening element, absent any criticality, is only considered to be the "optimum" material that a person having ordinary skill in the art at the time the invention was made using routine experimentation would have found obvious to provide for the stiffening element disclosed by Harada or JP since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. In re Leshin, 125 USPQ 416.

For claim 25: the use of the particular material, i.e., ductile polymer, as stated in claim 25, for the probe, absent any criticality, is only considered to be the "optimum" material that a person having ordinary skill in the art at the time the invention was made using routine experimentation would have found obvious to provide for the probe element disclosed by Harada or JP it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. In re Leshin, 125 USPQ 416.



Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the probe, of the device disclosed by JP, so as to have the intermediate portion made of a stiff core and a softer sheath, as taught by Harada, so as to re-shape the probe when necessary for the use, and to re-shape it back in a linear shape for storage.

6. Claims 1-2, 4, 10-11, 16-17, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babkes (U.S. 6634789) in view of JP.

Babkes discloses in Figs. 1-3 a digital thermometer for measuring a temperature of a living body by inserting a portion of a thermometer probe in a mouth of the living body. The probe has a first (distal) end, a second (proximal) end and an intermediate portion. A temperature sensor is disposed near the distal end of the probe. The device also has a housing portion separate from the probe and having a display for displaying the measured temperature. The device also has an electronic circuitry within the housing in communication with the temperature sensor to receive a signal from the temperature sensor and translate the signal into a signal representative of the temperature measured by the temperature sensor, the translated data is being displayed on the digital display.

For claims 10-11: Babkes discloses a storage chamber 182 including an opening to receive the probe so as the probe can be inserted in a probe cover 184 located in the chamber and pull said probe cover from the chamber 182. The chamber 182 is configured to receive replaceable probe covers (cartridge). The probe is connected to

the housing by a cord and having a chamber to store the probe. There is a (control) button 168 in the vicinity of probe to eject probe cover in a bio waste.

Babkes does not explicitly teach that the intermediate portion of the probe having non-linear shape, as stated in claim 1, that it is fixed as a non-linear shape, as stated in claim 2, with the remaining limitations of claims 1-2, 4, 10-11, 16-17, 20-21

JP discloses in Figs. 2-3 a device having a thermometer probe having a first end, a second end and a fixed curved (non-linear) intermediate portion. As shown in Fig. 2, the intermediate portion has a curve of a substantially constant radius.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shape of the probe disclosed by Babkes, so as to have a curved intermediate portion, as taught by JP, in order to allow the user to position the probe onto a patient's upper lip to perform a stable, easy and accurate thermometry without making significant accommodations.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harada and JP as applied to claims 1-9, 22-27 above, and further in view of Haberl (U.S. 6105620).

Harada and JP disclose the device as stated above in paragraph 4.

They do not explicitly teach a segmented stiffener, as stated in claim 8.

Haberl discloses a curved probe wherein a stiffener can comprise more strings (segmented) (col. 3, line 30-31)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shape of the probe disclosed by Harada and

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JP, so as to have a curved intermediate portion, as taught by Haberl, in order to allow the user to position the probe onto a patient's upper lip to perform a stable, easy and accurate thermometry without making significant accommodations.

8. Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Babkes and JP as applied to claims 1-2, 4, 10-11, 16-17, 20-21 above, and further in view of Saccardo et al. (U.S. 6491630) [hereinafter Saccardo].

Babkes and JP disclose the device as stated above in paragraph 6.

They do not explicitly teach a pivotal display, as stated in claim 15.

Saccardo discloses a hand held device having a display pivotably attached to a housing, as shown in Figs. 1, 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, disclosed by Babkes and JP, so as to have a pivotally attached display, as taught by Saccardo, in order to allow the user to close the device when not in use, so as to prevent the display from damage.

9. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babkes and JP as applied to claims 1-2, 4, 10-11, 16-17, 20-21 above, and further in view of Haghkar (U.S. 5044770).

Babkes and JP disclose the device as stated above in paragraph 6.

They do not explicitly teach a retractable cord, as stated in claim 18 and the remaining limitations of claim 19.

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Haghkar discloses a thermometer comprising a probe, a housing and a retractable cord (cable) 13 which when a reel (actuator) 23 is actuated, retracts inside, and the cable 13 is stored within the housing when the probe is not in use.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device, disclosed by Babkes and JP, so as to have a retractable cord/ cable, as taught by Haghkar, so as to allow the user to store the cord/ cable within the housing when the probe is not in use, in order to prevent the cord from being tangled or damaged.

#### ***Allowable Subject Matter***

10. Claims 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments filed on February 11, 2005 have been fully considered but they are not persuasive.

With respect to Babkes and JP: Applicant states that the Examiner does not have motivation to combine Babkes and JP because JP is directed to a probe for a semiconductor. This argument is not persuasive because, Examiner, in the rejection on the merits, uses JP 61270631 (digital clinical thermometer), not JP2004045147, as interpreted by Applicant.

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Applicant states that Examiner does not have a motivation to combine references, and uses the motivation from applicant's disclosure. This argument is not persuasive because, although, not explicitly stated, the motivation to combine comes from the drawings by JP showing a curved probe comfortably positioned in the patient's mouth, the position does not require to hold or support the probe.

With respect to Babkes and Eagan: this argument is now moot.

With respect to Haberl: the previous arguments are now moot in view of the new ground of rejection. In the instant Office action, the examiner uses Haberl as a secondary reference with Harada as a primary reference. Harada already teaches a curved probe, therefore, the Examiner uses Haberl only for its teaching of the particular stiffener for curved probe. Also, in response to applicant's statement that Haberl is a non-analogous art, it has been held that the determination that a reference is from non-analogous art is twofold. First, we decide if the reference is within the field of inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Wood, 202 USPQ 171, 174.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

**Meisner U.S. 4601589 teaches in Fig. 3 an electronic clinical thermometer with retractable probe/ cord.**

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

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GKV

Gail Verbitsky

Primary Patent Examiner, TC 2800

A handwritten signature in black ink, appearing to read "G. Verbitsky", with a long horizontal flourish extending to the right.

April 13, 2005